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XIAO, KE				
ART UNIT		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

09/746,778

Applicant(s)

ERICSON, PETTER

Examiner

Ke Xiao

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-63 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 45-63 is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Specification

The amendment filed August 29th 2008 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

"In other words, a computer-readable medium encoded with a computer program includes instructions for causing a computer to determine, in response to the receipt of information which contains at least one position on an imaginary surface, to which region on the imaginary surface the position or positions belong, and to determine from the region affiliation how the information is to be managed".

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 42 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one

skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The amendment to the specification in order to further define the terms "computer readable medium" used in the claim is considered new matter, which makes the claim language be considered new matter because it is *specifically* defined by the newly added amendment to the specification. The originally filed disclosure does not provide support for the amended limitation of "computer readable medium" so the "computer readable medium" claimed in claim 42 is new matter.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 2-41 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Marc Dymetman and Max Copperman, Intelligent Paper (herein referred to as Dymetman).

Regarding **Claim 61**, Dymetman teaches a system for information management (Dymetman, Fig. 1 pg. 393) comprising:

a central unit (Dymetman, Fig. 1 pgs. 393 and 394 central server); and

a plurality of user units which are arranged to record and send information to the central unit, wherein particulars are stored in the central unit about a plurality of regions

(Dymetman, pgs. 396 Figure of Europe and 397), each of which represents an area on at least one imaginary surface (Dymetman, imaginary surface are the digital pages), wherein the imaginary surface represents physical positions in a unique and continuous manner (Dymetman, physical surfaces are pieces of intelligent paper), and wherein the physical positions are coded by a position coding pattern and wherein the position coding pattern is incapable of being present in its entirety on any single base (Dymetman, pg. 397 there can be 64-bit unique pages of intelligent paper, which are incapable of being present on any single base),

each of the user units is arranged to record information which comprises at least one position on the imaginary surface and to send the information to the central unit (Dymetman, pg. 397, besides the unique ID of the sheets of intelligent paper, there are coordinates for each page as well), and

the central unit is arranged, in response to the receipt of the information from a user unit, to identify to which region the at least one position belongs and to determine how the information is to be managed based on the region affiliation (Dymetman pg. 397, each physical page corresponds to a unique digital page which is the region and then the data is managed according to the unique digital page).

Regarding **Claim 62**, Dymetman further teaches that the imaginary surface is an electronic representation of the position coding pattern (Dymetman, pg. 396-397, Fig. Europe).

Regarding **Claim 63**, Dymetman further teaches a plurality of bases, wherein each base is printed with a different subset of the position coding pattern, and wherein

each user unit is configured to record the at least one position by means of subset of the position coding pattern on the base (Dymetman, pg. 396-397 a great many pages can be printed each a subset of the position coding pattern because of the unique identification bits).

Regarding **Claim 2**, Dymetman further teaches that each of the regions particulars are stored in the central unit about an owner of the region (Dymetman, pg. 396-397 each page has a unique ID code and information about that ID code and associated digital page is stored at a central unit).

Regarding **Claim 3**, Dymetman further teaches that rules for each region are stored in the central unit for how the information which is identified as belonging to the region is to be managed (Dymetman, pg. 396-397, 399-401 different rules or applications for each region are also stored for each unique page).

Regarding **Claim 4**, Dymetman further teaches that central unit is arranged to forward the information which is received from the user unit to a recipient (Dymetman, pg. 400 meeting agenda is forwarded to everyone who is part of the meeting including the meeting organizer).

Regarding **Claim 5**, Dymetman further teaches that the recipient is defined by the region affiliation (Dymetman, pg. 400 meeting agenda is clearly only forwarded to those individuals who have a specific region affiliation).

Regarding **Claim 6**, Dymetman further teaches that the recipient is one of the user units (Dymetman, pg. 400 meeting agenda is forwarded to everyone who is part of the meeting including the meeting organizer).

Regarding **Claim 7**, Dymetman further teaches that the central unit is arranged to attach a predetermine data packet for the recipient, which data packet is determined by the region affiliation (Dymetman, pg. 400 data is clearly defined by the intended recipient which is defined by the region affiliation).

Regarding **Claim 8**, Dymetman further teaches that the central unit is arranged to store the information which is received from the user unit in a location which is indicated by the region affiliation (Dymetman, pg. 400-401 data stored at the central unit is clearly defined by the region affiliation which is given by the identification number).

Regarding **Claim 9**, Dymetman further teaches that the central unit is arranged to process the information which is received from the user unit in a way which is defined by the region affiliation (Dymetman, pg. 399-401 applications are all different depending on the identification of the user unit).

Regarding **Claim 10**, Dymetman further teaches that at least one position is a plurality of positions which define characters in which the central unit is arranged to convert the received positions to at least one character (Dymetman, pg. 401 handwritten messages can be provided which means different positions can be grouped together to make up different characters).

Regarding **Claim 11**, Dymetman further teaches that each of the user units has a pen point (Dymetman, pg. 401 pen pointer).

Regarding **Claim 12**, Dymetman further teaches that each of the user units has a unique user identify and is arranged to include the user identity in the information to the central unit (Dymetman, pg. 397 unique identifiers for each user unit).

Regarding **Claim 13**, Dymetman further teaches that a plurality of products from which the at least one position is recorded (Dymetman, pg. 397 there are many unique intelligent paper user units).

Regarding **Claim 14**, Dymetman further teaches that a subset of a position coding pattern, which codes a large number of position on the imaginary surface is reproduced on each of the products, the positions which are recorded by the user units being positions on the imaginary surface and being recorded by means for the subset of the position coding pattern on the product (Dymetman, pg. 397 each unique intelligent paper is a subset of a physical surface coding which is related to an imaginary surface).

Regarding **Claim 15**, Dymetman further teaches that the position coding pattern is constructed of symbols and each position on the imaginary surface is coded by a predetermined number of symbols, and in which each user unit is arranged to continually record the symbols to provide a description of the movement in the form of coordinates when it is moved across the subset in order to generate the information (Dymetman, pg. 397, each unique intelligent paper has a predetermined number of symbols on it and these are read continuously by a pointer which translates the symbols into identifiers and coordinates).

Regarding **Claim 16**, Dymetman further teaches that each user unit is arranged to record the information by recording at least two coordinates in coded form for each position, to decode the coded coordinates and to include at least certain of the coordinates in the information to the central unit (Dymetman, pg. 397, each unique

intelligent paper has a predetermined number of symbols on it and these are read continuously by a pointer which translates the symbols into identifiers and coordinates).

Regarding **Claim 17**, Dymetman teaches a system for information management (Dymetman, pg. 392-393), comprising:

a central unit and a plurality of user units which are arranged to record and send information to the central unit (Dymetman, pg. 393-394, central unit is used by the intelligent paper to communicate instructions and data); and

a plurality of products each of which has a subset of a position coding pattern, which codes a large number of positions on at least one imaginary surface, wherein the imaginary surface represents physical positions in a unique and continuous manner, and wherein the physical positions are coded by the position coding pattern and wherein the position coding pattern is incapable of being present in its entirety on any single product, wherein the pattern comprises a plurality of symbols, each symbol contributing to the coding of at least two unique positions on the imaginary surface (Dymetman, pg. 397, each unique intelligent paper has a predetermined number of symbols on it and these are read continuously by a pointer which translates the symbols into identifiers and coordinates, all of the unique pieces would not be able to fit on any single product, each symbol represents a unique coordinate pair on the current page which is unique from all other pages also each coordinate pair is two unique positions), further wherein

particulars are stored in the central unit about a plurality of regions, each of which represents an area on the imaginary surface (Dymetman, pg. 397 unique identifiers for

each user unit wherein each one represents a different piece of the imaginary surface because of their unique identifiers), wherein

each of the user units is arranged to record information which comprises at least one position on the imaginary surface by means of the subset of the position coding pattern on the product and to send the information to the central unit (Dymetman, pg. 397, each unique intelligent paper has a predetermined number of symbols on it and these are read continuously by a pointer which translates the symbols into identifiers and coordinates), and wherein

the central unit is arranged, in response to the receipt of the information from a user unit, to identify to which region the at least one position belongs and to determine how the information is to be managed based on the region affiliation (Dymetman pg. 397, each physical page corresponds to a unique digital page which is the region and then the data is managed according to the unique digital page).

Regarding **Claim 18**, Dymetman teaches a central unit for information management (Dymetman, pg. 392-393), comprising:

a memory storing particulars a plurality of regions, each region corresponding to an area on an imaginary surface (Dymetman, pg. 393-394, central unit stores information regarding each piece of intelligent paper and any associating rules or data), wherein the imaginary surface represents physical positions in a unique and continuous manner, wherein the physical positions are coded by a position coding pattern, and the imaginary surface represents a physical area which is incapable of being present in its entirety on any single base, wherein the position coding pattern comprises a plurality of

symbols, each symbol contributing to the coding of at least two unique positions on the imaginary surface (Dymetman, pg. 396-397, physical surfaces are pieces of intelligent paper represent an imaginary space in a unique and continuous manner and can't be on any single base 2^{64} number of intelligent paper pieces each symbol represents a unique coordinate pair on the current page which is unique from all other pages also each coordinate pair is two unique positions), and

the memory further containing instructions for determining, in response to the receipt of information which contains at least one position on the imaginary surface, to which region the at least one position belongs, and determining how the information is to be managed based on the region affiliation (Dymetman, pg. 399-401 depending on the application the central server will have different rules and data uniquely associated with each piece of intelligent paper).

Regarding **Claim 19**, Dymetman further teaches that for each of the regions stores particulars about an owner of the region (Dymetman, pg. 399-401 depending on the application the central server will have different rules and data uniquely associated with each piece of intelligent paper as well as the owner of the region).

Regarding **Claim 20**, Dymetman further teaches that each of the regions stores rules for how information which is identified as belonging to the region is to be managed (Dymetman, pg. 399-401 depending on the application the central server will have different rules and data uniquely associated with each piece of intelligent paper).

Regarding **Claim 21**, Dymetman further teaches forwarding the information to a recipient (Dymetman, pg. 400 meeting agenda is forwarded to everyone who is part of the meeting including the meeting organizer).

Regarding **Claim 22**, Dymetman further teaches attaching a predetermined file with the information for the recipient, which file is determined by the region affiliation (Dymetman, pg. 400 meeting agenda is forwarded to everyone who is part of the meeting including the meeting organizer).

Regarding **Claim 23**, Dymetman further teaches storing the information in a location which is indicated by the region affiliation (Dymetman, pg. 400-401 information is stored to a specific location depending application which directly dependent on the region affiliation).

Regarding **Claim 24**, Dymetman further teaches processing the information in a way which is defined by the region affiliation (Dymetman, pg. 399-401 different applications and there by different region affiliation determine how information is processed by the central server).

Regarding **Claim 25**, Dymetman further teaches converting the received position into at least one character (Dymetman, pg. 401 many position are be interpreted as a character).

Regarding **Claim 26**, Dymetman teaches a method for management of information which is recorded using at least one user unit (Dymetman, pg. 393-394 many user units and central management), comprising:

recording information by each user unit which includes at least one position on at least one imaginary surface, wherein the imaginary surface represents physical positions in a unique and continuous manner, wherein the physical positions are coded by a position coding pattern (Dymetman, pg. 396-398 pointer technology to read symbols on the intelligent paper to correspond to a unique position in a imaginary surface), and the imaginary surface represents a physical area which is incapable of being present in its entirety on any single base, wherein position coding pattern comprises a plurality of symbols, each symbol contributing to the coding of at least two unique positions on the imaginary surface (Dymetman pg. 397 each symbol represents a unique coordinate pair on the current page which is unique from all other pages also each coordinate pair is *two* unique positions);

receiving the information at a central unit, wherein the central unit contains particulars about a plurality of regions, further wherein each region represents an area on the at least one imaginary surface (Dymetman, pg. 396-397, 399-401 different rules or applications for each region are also stored for each unique page);

identifying, in response to the receipt of the information from the user unit, which region the at least one position belongs (Dymetman, pg. 397 unique identifiers for each user unit wherein each one represents a different piece of the imaginary surface because of their unique identifiers); and

determining how to manage the information based on the region affiliation (Dymetman, pg. 399-401 depending on the application the central server will have different rules and data uniquely associated with each piece of intelligent paper).

Regarding **Claim 27**, Dymetman further teaches that for each of the regions stores particulars about an owner of the region (Dymetman, pg. 397 unique identification code tells the central server exactly who owns the region).

Regarding **Claim 28**, Dymetman further teaches that each of the regions stores rules for how information which is identified as belonging to the region is to be managed (Dymetman, pg. 396-397, 399-401 different rules or applications for each region are also stored for each unique page).

Regarding **Claim 29**, Dymetman further teaches forwarding the information which is received from the user unit to a recipient (Dymetman, pg. 400 meeting agenda is forwarded to everyone who is part of the meeting including the meeting organizer).

Regarding **Claim 30**, Dymetman further teaches that the recipient is defined by the region affiliation (Dymetman, pg. 400 meeting agenda is forwarded to everyone who is part of the meeting including the meeting organizer).

Regarding **Claim 31**, Dymetman further teaches that the central unit sends the information which is received from the user unit back to the user unit (Dymetman, pg. 400 meeting agenda is forwarded to everyone who is part of the meeting including the meeting organizer).

Regarding **Claim 32**, Dymetman further teaches that the central unit attaches a predetermined data packet for the recipient, which data packet is determined by the region affiliation (Dymetman, pg. 400 meeting agenda is forwarded to everyone who is part of the meeting including the meeting organizer).

Regarding **Claim 33**, Dymetman further teaches that the central unit stores the information which is received from the user unit in a location which is indicated by the region affiliation (Dymetman, pg. 400-401 product catalogue and hotel reservations).

Regarding **Claim 34**, Dymetman further teaches that the central unit process the information which is received from the user unit in a way which is defined by the region affiliation (Dymetman, pg.399-401 different applications process information differently based on region affiliation).

Regarding **Claim 35**, Dymetman further teaches that the at least one position is a plurality of positions which define characters, he central unit converting the received positions to at least one character (Dymetman, pg. 401 several positions together can make up characters).

Regarding **Claim 36**, Dymetman further teaches that the user unit has a unique user identity and includes the user identity in the information which is sent to the central unit (Dymetman, pg 397 ID codes are sent to the central unit to uniquely identify the intelligent paper).

Regarding **Claim 37**, Dymetman further teaches at least one position is recorded on a product (Dymetman, pg. 401 pen pointer can record on the product).

Regarding **Claim 38**, Dymetman further teaches that each of the user units has a pen point which makes a mark on the product during the recording of the at least one position (Dymetman, pg. 401 pen pointer can record on the product).

Regarding **Claim 39**, Dymetman further teaches that the product has a subset of a position coding pattern which codes a large number of positions on the imaginary

surface, the positions which are recorded by the user units being positions on the imaginary surface and being recorded by means of the subset of the position coding pattern on the product (Dymetman, pg. 396-397 a great many pages can be printed each a subset of the position coding pattern because of the unique identification bits).

Regarding **Claim 40**, Dymetman further teaches that the position coding pattern is constructed of symbols and each position on the imaginary surface is coded by predetermined number of symbols, each user unit, when is it moved across the subset to generate the information, continually recording the symbols to provide a description of the movement in the form of coordinates (Dymetman, pg. 397, each unique intelligent paper has a predetermined number of symbols on it and these are read continuously by a pointer which translates the symbols into identifiers and coordinates).

Regarding **Claim 41**, Dymetman further teaches that the user unit records the information by recording for each position at least two coordinates in coded form, by decoding the coded coordinates and by including at least certain of the coordinates in the information to the central unit (Dymetman, pg. 397).

Response to Arguments

Applicant's arguments filed November 14th 2008 have been fully considered but they are not persuasive.

Newly added limitations fail to overcome the prior art. The applicant's assertion that the subject matter of claim 54 is separately patentable as it stands is not persuasive. The examiner discussed the patentability of the claimed subject matter and

it is patentable in combination with the limitations of the claims from which it depends. The examiner had suggested how the subject matter of claim 54 could be *further defined* and made separately patentable, however said suggestion has not been incorporated into the newly amended claims and therefore the rejection of the remaining claims stands.

Applicant's arguments filed on August 29th 2008, with respect to claims 1-42 and have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

Claims 45-63 allowed.

The following is an examiner's statement of reasons for allowance:

Claims 45-63 are allowed/allowable because prior art fails to teach "wherein *the* two dimensional coordinate reference represents physical positions in a unique and continuous manner". Emphasis added. Prior art teaches a plurality of two dimensional coordinate references however they are not *a single continuous two dimensional coordinate reference* as claimed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ke Xiao whose telephone number is (571)272-7776. The examiner can normally be reached on Monday through Friday from 8:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sumati Lefkowitz/
Supervisory Patent Examiner, Art Unit 2629

/Ke Xiao/
Examiner, Art Unit 2629